FINDING OF NO SIGNIFICANT IMPACT

Defense National Stockpile Center
Somerville Depot
Somerville, New Jersey
Mercury Overpacking
Environmental Assessment

May 24, 2001

Department of Defense
Defense Logistics Agency
Defense National Stockpile Center
Fort Belvoir, VA

AGENCY: U.S. Department of Defense

ACTION: Finding of No Significant Impact

SUMMARY: An environmental assessment (EA) has been prepared to assess the potential environmental impacts associated with the proposed action to over pack the Defense National Stockpile Center's mercury stored at its Somerville, New Jersey, Depot. Seventy-six pound mercury flasks will be placed into steel drums for continued storage at the Depot. Based on the analysis in the EA, the Defense National Stockpile Center (DNSC) has determined that the proposed action is not a major federal action significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act (NEPA) (42 U.S.C. 4321 et seq.). Therefore, the preparation of an environmental impact statement is not required. The EA also analyzed the No Action Alternative (as required by NEPA). DNSC has also determined that this conclusion is further supported by the environmental impacts and risks analyzed in an EA entitled Mercury Reflasking (dated October 2000). The proposed actions associated with this overpacking EA are similar to or lesser than those analyzed in the Reflasking EA. A Finding of No Significant Impact was issued on that EA on October 19, 2000.

ADDRESSES AND FURTHER INFORMATION: Copies of this EA, and further information concerning the proposed action, are available from:

Attention: Mercury Overpacking EA
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Additional information about the NEPA process can be obtained from the Council on Environmental Quality (CEQ) "NEPANET" website at "http://ceq.eh.doe.gov/nepa/nepanet.htm."

PURPOSE AND NEED: Under authority delegated by the Secretary of Defense under the Strategic and Critical Materials Stock Piling Act of 1939, as amended (50 USC 98 et seq.), DNSC, a subordinate command of the Defense Logistics Agency (DLA), is responsible for all activities necessary to provide safe, secure, and environmentally sound stewardship for all commodities in the National Defense Stockpile. DNSC is also responsible for the disposition of stockpiled items declared excess to national defense needs and authorized for sale by Congress.

DNSC is responsible for the management of stocks of certain critical and strategic materials as determined by Congress. Mercury is one of these materials. Mercury is currently stored in cast iron or steel flasks at three DLA/DNSC depots located in New Haven, Indiana; Warren, Ohio;

Somerville, New Jersey, and at the Department of Energy's (DOE's) Y–12 National Security complex located at Oak Ridge, Tennessee.

The Somerville Depot Mercury Over packing EA was prepared to consider the transfer of mercury-containing flasks into new containers (steel drums) to address an interim management need to continue to provide for the safe and secure storage of the mercury. Ultimate disposition of the mercury stockpile, including long-term storage, will be evaluated in a forthcoming Environmental Impact Statement. There are 2,615 metric tons of mercury stored in 75,980 steel flasks at the Somerville Depot, which represents fifty-nine percent of the excess mercury that DNSC has in storage.

BACKGROUND: The Somerville Depot consists of approximately seventy-seven acres of land owned by the Federal Government. The entrance to the Depot is through Department of Veterans Affairs property on the western side of New Jersey Route 206, approximately two and a half miles (four kilometers) south of Somerville, New Jersey. The mercury is stored in accordance with DNSC requirements, and is inspected as required by DNSC mercury storage inspection procedures. The DNSC health and safety guidelines for mercury ensure that worker exposure is limited.

PROPOSED ACTION: The proposed action is to transfer the mercury flasks stored at the Somerville Depot into steel drums (i.e, overpack).

ALTERNATIVES CONSIDERED: This EA describes the proposed action as well as a No Action Alternative as required by NEPA.

No Action: Under the No Action Alternative, the mercury would remain generally undisturbed, in sealed flasks inside locked warehouses. The condition of the stockpile would be monitored in accordance with DNSC mercury storage area inspection procedures. If any leaks were detected, or if there was an abnormally high concentration of mercury in the air as measured by a mercury vapor analyzer, cleanup and personal protective equipment is available nearby. Although leaking flasks would be anticipated under this alternative, releases of mercury to the environment are unlikely.

Transfer into Steel Drums: Under this alternative, mercury flasks would be placed into steel drums lined with plastic drum liners and containing cardboard bracing, and the drums would then be sealed. The drums would be placed in a warehouse with newly sealed floors, where they would remain in interim storage until the completion of an ongoing EIS.

ENVIRONMENTAL IMPACTS: The results of evaluations of potential human health and environmental consequences are summarized in this section.
Human Health – Human health risks were evaluated for storage and reflasking operations at the depots, and for transportation of materials and wastes. These activities were evaluated for routine operations and accident conditions. This evaluation considered the potential impacts to children and

the elderly.

Routine Operations – Routine operations refers to the conduct of the proposed action (transfer of mercury-containing flasks into steel drums, followed by continued storage) without incident. The operation would be carried out using equipment (including mercury vapor detectors), personal protective gear, and procedures designed to protect workers and minimize any emissions of mercury to the environment. Therefore, routine operations pose low to negligible risk to depot workers and the general public from exposure to mercury.

Facility Accidents – Numerous accident scenarios were considered for storage and reflasking operations. These scenarios include slow leaks, dropped or punctured flasks, pallet collapse, forklift fire, building fire, earthquake, high winds/tornadoes, lightning, snow loads, aircraft crash, vehicle crash, and explosions or fires at nearby facilities. All of the accident scenarios were determined to have a low or negligible risk.

Transportation – Under the proposed action, new pallets and drums would be trucked to the Depot, and waste pallets, waste flasks and small amounts of hazardous waste would be trucked offsite. It is expected that the normal risks associated with truck transportation—injuries or fatalities due to collisions—would be a larger contribution to risk than the transportation of residual amounts of mercury. Based on the analysis presented in this EA, no serious truck accidents or accident fatalities are anticipated to result from the proposed action. Even if a serious truck accident were to occur, it is unlikely that the impacts to the public would exceed those evaluated for facility accidents. Therefore, the impacts would be low to negligible.

Environmental Justice - Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires that Federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs and activities on minority and low-income populations. Because no adverse effects are anticipated as a result of the proposed actions during both normal operation and accident conditions, there would be no opportunity for disproportionately high and adverse consequences on minority, or low-income populations.

Ecological Risk - If mercury becomes airborne as a result of an accident, it may deposit on the ground or on surface waters. If the mercury were present at high enough concentrations it could be toxic to plants and animals living or foraging in the area. The ecological risk assessment evaluated this possibility and concluded that the ecological risk is low or negligible for all of the evaluated accident scenarios.

Waste Management – Overpacking activities would generate wastes (i.e., empty flasks, old box pallets, workers' protective clothing, and wipes) that would require recycling, treatment and/or disposal. Hazardous waste (comprised mostly of workers' protective clothing and wipes) would be sent to offsite permitted commercial facilities for treatment and/or disposal. It is expected that

empty flasks (nonhazardous waste under the Resource Conservation and Recovery Act [RCRA] empty container rule) would be trucked to an offsite treatment facility to recover any residual mercury. The cleaned flasks would then be sent to a scrap metal recycling facility. A representative number of samples would be taken from the old box pallets to determine if they are contaminated with mercury. If contaminated, they would be trucked to a treatment facility for mercury recovery. If uncontaminated, the wood would be sent to a recycling facility or disposed of in a local landfill as solid waste. Because wastes would be packaged and trucked to offsite permitted commercial facilities for recycling, treatment and/or disposal, there would be no major impacts on the onsite waste management infrastructure.

Other Environmental Impacts - Storage and reflasking activities would result in small increases in air emissions, would not use appreciable quantities of natural resources, would not involve construction or land disturbance, would take place inside warehouses, and would only marginally increase the traffic flow to and from the depots. In addition, the proposed action would not occur in a floodplain, and would not impact wetlands, threatened and endangered species, and cultural resources. Therefore, the consequences of the proposed action are expected to be negligible for air quality and noise, geology and soils, water resources, ecological resources, cultural resources, land use and visual resources, and site infrastructure, and would comply with all applicable environmental regulations and executive orders.

Cumulative Impacts - Because the contributions from the Proposed Action would be extremely small, the proposed action is not expected to contribute substantially to the cumulative impacts from past or anticipated activities at the depots and along the transportation corridors.

DETERMINATION: Based on the analysis in this EA, I conclude that the proposed action does not constitute a major federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, an EIS for the proposed action is not required.

Issued at Fort Belvoir, VA this xx day of May, 2001.

RICHARD CONNELLY, Administrator
Defense National Stockpile Center